

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-10.

11. (New) Coating for a mechanical part comprising :
 - a first layer of hydrogenated amorphous silicon carbide designed to be in contact with the mechanical part,
 - a stack formed by an alternation of layers respectively of hydrogenated amorphous carbon and hydrogenated amorphous silicon carbide
 - and an external layer of hydrogenated amorphous carbon,the stack being arranged between the first layer and the external layer.
12. (New) Coating according to claim 11, wherein the coating has a total thickness comprised between 10 and 20 micrometers.
13. (New) Coating according to claim 11, wherein the first layer has a thickness comprised between 150 and 300 nanometers.
14. (New) Coating according to claim 11, wherein the external layer has a thickness comprised between 0.5 and 2 micrometers.
15. (New) Coating according to claim 11, wherein each of the layers of hydrogenated amorphous silicon carbide of the stack has a thickness comprised between 5 and 50 nanometers.

16. (New) Coating according to claim 11, wherein each of the layers of hydrogenated amorphous carbon of the stack has a thickness comprised between 10 and 150 nanometers.
17. (New) Coating according to claim 11, wherein the stack comprises a number of layers comprised in between 400 and 1000.
18. (New) Method of depositing a coating for a mechanical part according to claim 11, consisting in depositing, successively, in a same plasma enhanced chemical vapour deposition enclosure:
 - a first layer of hydrogenated amorphous silicon carbide,
 - an alternation of layers respectively of hydrogenated amorphous carbon and hydrogenated amorphous silicon carbide,
 - and an external layer of hydrogenated amorphous carbon.
19. (New) Method of depositing according to claim 18, wherein the pressure in the enclosure, when deposition of the layers is performed, is comprised between 0.05mBar and 0.5mBar.
20. (New) Method of depositing according to claim 18, wherein the mechanical part is previously cleaned and is subjected to an ionic stripping.
21. (New) Coating according to claim 12, wherein the first layer has a thickness comprised between 150 and 300 nanometers.